

1	MISCELLANEOUS	17 A	..Adjustable bands
2	ALBUM FASTENERS	17 B	..Closed loops
2.5	GUN BAND TYPE	17 AP	..Plastic bands
3.1	ARTICLE HOLDER ATTACHABLE TO APPAREL OR BODY	19	..With tighteners
4	..Chatelaine safety hooks	268	..Wedge
5	..Flower	269	..Winder
6	..Pin attached	270	..Self-locking (dead center or snap action)
7	..Napkin	271	...Adjustable girth
8	..Hook	272	....Rack bar
9	..Neck enclosing	273	..Lever
10 R	..Pencil	274 R	..Worm and tooth
11 R	..Clasp attached	274 P	...Pivotal worm band clamp
11 FE	...Finger ear, belt attached pencil holder	274 WB	...Radial worm band clamp
11 PP	...Pencil holder with paper clip	275	..Integral thread
11 CC	...Combined and convertible pencil holder	276	...External thread
11 CT	...Container type pencil holder	277	....Both ends threaded
11 HC	...Separate pencil holder and pocket engaging clip	278	..Radial screw
11 S	...Sliding jaw pencil holding clip	279	..Tangential screw
11 C	...Wire pencil holder	280	...Adjustable girth
11 F	...Flexible shank pencil holder	281	....Step adjustment
11 M	...With movable catch (e.g., pin pivoted lever, roller, etc.)	282	.....Plural separable parts
11 P	...Pivoted jaw pencil holder	283	...Wire
12	..Pin attached	284	...Plural separable parts
10 A	..Rule holder	285	...Pivotal strap parts
15	..Sleeve holder (e.g., for inner coat)	286	...Plural wrap
13	..Pin attached	20 R	..Metal bands
3.2	..Arm or leg carried holder	21	..Separate connections
3.3	..Eyeglass holder including retaining means	22	...One piece
3.4	..Neck supported holder	23 R	....Sheet metal
3.5	..Holder contains pocket engager (e.g., antitheft device, wallet protector)	23 B	.....Buckle band connection
3.6	..Key ring holder	23 W	.....Swedged sheet metal band connection
3.7	..Receptacle type holder	23 EE	.....End-to-end integral with band connecting means
3.8	..Eyeglass or spectacle case	24	...Pivoted parts
3.9	..Open-ended holster type holder	25	...Wedging parts
3.11	..Article held by clip with spring (e.g., leaf, coil) member	26	...Wire
3.12	..Article held by clip	20 CW	..Circumferentially swagged band clamp
3.13	..Article held by flexible connector (e.g., chain)	20 EE	..End-to-end integral band end connection
16 R	BALE AND PACKAGE TIES, HOSE CLAMPS	20 TT	..Ratchet and tool tightened band clamp
17 R	..Packet holders	20 S	..Spring closed band clamp
18	..Cord	20 LS	..Screw locked band clamp
		20 W	..Swedged to lock band ends
		27	..Wire
		28	..Separate connections
		29	...Wire
		30	..Wooden bands
		16 PB	..Plastic band
		30.5 R	BAG FASTENERS

30.5 W	.Swedged bag tie	57	..Adjustable
30.5 P	.Plastic band bag tie	58	..Cord loop
30.5 S	.Resilient slot bag tie	59	..Pivoted or sliding jaw
30.5 T	.Twist-to-close bag tie	60	..Pin attached
30.5 L	.Slides to lock bag end within housing	61	.Collar button combined
31 R	BELT FASTENERS	62	..Clasp attached
32	.Tighteners	63	..Pin attached
33 R	.Hinged	64	..Separable fastener
33 A	..Ring connected belt ends	65	.Tie, attached hook
33 F	..Bent over flanged ends	66.1	.Magnetic, adhesive, or snap type fastener connects tie to shirt
33 P	..Pintle pin connected belt ends	66.2	.Tie engaging loop with shirt engaging fastener
33 V	..V and round belts	66.3	.Tie knot engaging and collar attaching
33 L	..Overlapped belt ends	66.4	.Tie clip and shirt clasp attaching
33 B	..Sheet metal knuckles, common pintle	66.5	.Tie clip and fastening pin
33 C	..Wire knuckles, common pintle	66.6	.Tie pin with shirt fastener
33 K	..Knuckle integral with belt material	66.7	.Tie stiffener with shirt fastener
33 M	..Multiple pintles interconnected V-belt type	66.8	.With pivotal jaws having spring means
34	.Lacing	66.9	.Slider
35	.One piece	66.11	.Ornamental
36	..Deflecting prong	66.12	..Key shaped
37	.Screw clamp	66.13	.Resilient clasp
38	.Splices	67 R	PAPER FASTENER
39	.Wire	67.1	.With screw threaded or notch engaging securing means
31 B	.Butt connected belt ends	67.3	.Resiliently biased
31 C	.V, round, trapezoidal belts	67.5	..Including means to open or close fastener
31 F	.Flanged belt ends, connector hold ends	67.7	...Pivotally mounted on pintle
31 L	.Lapped ends of endless belts	67.9	..One piece
31 H	.Hinged ends of endless belts	67.11	...Mounted on support means
31 W	.Wire strands reinforce belts	67 AR	.Adhesive
31 V	.Velcro and zipper belt end connection	67 CF	.Corner fastened
40	BUTTONERS	67 P	.Paper-penetrating
41.1	CUFF HOLDER	68 R	STRAP TIGHTENERS
42	.Adjustable	69 R	.Cam lever and loop
43	.Sleeve clasp and button for cuff	70 R	..Step adjusted
44	.Sleeve clasp and clasp for cuff	70 SK	...Ski boot and garment fasteners
45	.Sleeve clasp and hook for cuff	70 T	...Split ring tightener
46	.Sleeve clasp and pin for cuff	70 CT	...Chain and rope tighteners
47	.Sleeve pin and button for cuff	70 TT	...Tire chain tighteners
48	.Pin fastener	70 ST	...Strap tighteners
49.1	NECKTIE FASTENER	70 J	...Jewelry
50	.Bands	69 ST	..Strap tighteners
51	..End-securing pin	69 TT	..Tie chain tighteners
52	..Gripping	69 CT	..Cargo tie down
53	..Depressors	69 CF	..Cover fasteners
54	...Button engaging	69 T	..Chain tighteners
55	...Pin or spur		
56	.Button engaging		

69 TM	..Strap tightener machine	385	.Having slider or interconnected sliders with access opening for diverse-art-member
69 TS	..Toggle actuated sliding jaw		
69 J	..Jewelry		
69 AT	..Split ring with tightener	386	.Plural independently movable sliders
69 FP	..Concrete form panels		
69 SB	..Seat belt buckles	387	.With distinct, stationary means for anchoring slider
69 WT	..Chain, cable, wire tighteners, and anchors	388	..And for aligning surfaces or obstructing slider movement
69 EF	..Envelope fasteners		
69 SK	..Ski boot and garment fasteners	389	.With distinct member for sealing surfaces
71 R	..Strap-attached folding lever		
71 T	..Toggle latch	390	.With distinct separable-fastener
71 ST	..Strap tightener	391	.Having coiled or bent continuous wire interlocking surface
71 TT	..Tire antiskid strap tightener		
71 SB	..Seat belts	392	..With stringer tape interwoven or knitted therewith
71 A	..Split ring fasteners		
71 J	..Jewelry-watch straps	393	..With stringer tape having specific weave or knit pattern
71 TD	..Tie downs (covers, articles)		
71 CT	..Cable, wire, rope tightener	394	..With core encircled by coils or bends
71 SK	..Ski boot and garment fasteners		
71 SD	..Dress hem raisers	395	..With mounting portion having structural formations complementary to stitching
71.1	.Midline		
68 J	.Jewelry	396	..Attached by stitching
68 SB	.Seat belt	397	...String or stringer tape having distinctive property (e.g., heat sensitive)
68 AS	.Accordion straps		
68 PP	.Parallel poles clamp		
68 FP	.Form panels for walls		
68 CD	.Cargo tie down	398	..With stringer tape having distinctive property (e.g., heat sensitive)
68 CT	.Chain tighteners		
68 BT	.Split band with tightener		
68 TT	.Tire chain tighteners	399	.Having interlocking surface with continuous cross section
68 SK	.Ski, boot, and shoe fasteners	400	..Opposed interlocking surface having dissimilar cross section
68 A	.Fixed jaw with sliding or pivoted jaw		
68 B	.Rack and pinion and circular tighteners	401	.Having interlocking surface formed from single member with varying cross section
68 C	.Circular flange container clamp		
68 D	.Strap stretching tools, tighteners, and sealers	402	..Opposed surface having dissimilar cross section
68 E	.Buckle type	403	.Interlocking surface constructed from plural elements in series
68 F	.Integral piece		
68 T	.Toggle	404	..Having either noninterlocking element in, interrupted, or unequal length series
68 SC	.Stocking top		
72.1	TROUSER GUARDS, CLIPS, STRAPS (E.G., ABOVE SHOETOPS)	405	..With element structural feature unrelated to interlocking or securing portion
72.5	BEDCLOTHES HOLDERS	406	..Dissimilar opposed elements
72.7	T-HEAD NONGRIPPING, FABRIC ENGAGING TYPE	407	..Wire element
381	ZIPPER OR REQUIRED COMPONENT THEREOF	408	..Preattached to mounting cord
382	.Plural zippers	409	..Having interlocking portion with specific shape
383	..Zipper chain		
384	..Having surface sealing structure		

410	...Including symmetrical formations on opposite walls for engaging mating elements	433	.Including complementary, aligning means attached to ends of interlocking surfaces
411	...Including complementary formations on opposite walls for engaging mating elements	434	..Having specific mounting connection or reinforcing structure at connection
412	....Mating elements having reversed orientation of formations	435	.Including means attaching interlocking surfaces together
413	..Having mounting portion with specific shape or structure	436	.Including means for obstructing movement of slider
414	...Including embracing jaws	437	SLIT CLOSING MEANS INCLUDING GUIDES ON OPPOSITE EDGES OF SLIT AND SLIDABLE BRIDGING COMPONENT
415	.Slider having specific configuration, construction, adaptation, or material	438	.With hand-actuated lever for shifting bridging component
416	..Including relatively movable spaced wings (i.e., restraining walls)	439	.Including structure linking and allowing variations in separation between opposite-guide-contacting portions of component
417	..Including converging channel and relatively movable separator island	440	.Having bridging components attached in series along carrying element
418	..Including position locking-means attached thereto	441	.Having separate, independently movable, bridging components
419	...Protrusion on pull tab directly engaging interlocking surfaces	442	INCLUDING READILY DISSOCIABLE FASTENER HAVING NUMEROUS, PROTRUDING, UNITARY FILAMENTS RANDOMLY INTERLOCKING WITH, AND SIMULTANEOUSLY MOVING TOWARDS, MATING STRUCTURE (E.G., "VELCRO")
420	...Having surface engaging element shifted by reorientation of pull tab	306	.Combined with diverse fastener
421	....Resilient or spring biased element	443	.With distinct structure for sealing securement joint
422	.....Selectively shifted by either of two pull tabs	444	.With feature facilitating, enhancing, or causing attachment of filament mounting surface to support therefor
423	.....With relatively movable link	445	.Having filaments formed from continuous element interwoven or knitted into distinct, mounting surface fabric
424	.....Biased by distinct spring	446	.Having filaments of varied shape or size on same mounting surface
425	.....Having aperture cooperating with guide post	447	.With feature facilitating or causing attachment of filaments to mounting surface
426	..Including means preventing bunching of structure-to-be-secured or stringer	448	..Thermal or adhesive
427	..Having specific contour or arrangement of converging channel, separator island, or wing	449	.Having several, repeating, interlocking formations along length of filaments
428	...Spaced segments of each wall of channel supported by different wings		
429	..Including pull tab attaching means		
430	..Including means for attaching components of slider together		
431	..With ornamental slider		
432	.With means for concealing surfaces		

450	.Having opposed structure formed from distinct filaments of diverse shape to those mating therewith	323	..And separable fastening means for attached fastener
451	.Having filaments constructed from coated, laminated, or composite material	324	...Snap fastener
452	.Having mounting surface and filaments constructed from common piece of material	325	..Having roller means
287	FREIGHT CONTAINER TO FREIGHT CONTAINER FASTENER	326	.Clasp
288	DRUM OR CAN SPACER FASTENER	327	..Having pivoted members
289	TRIM MOLDING FASTENER	328	...Cam type member
290	.Having externally threaded attaching means	329	...Plural clasps
291	..And laterally extending biasing appendage	330	....And toggle operator
292	.Having laterally extending biasing appendage	331	....Spring biased
293	.Resilient metal type	332	.....Coil
294	..Strip formed	333	....And cam
295	..Sheet metal formed	334	...Coil spring biased
296	..Wire formed	335	..Plural clasps
297	.Plastic type	336	...Resilient type clasp
298	PLURAL FASTENERS HAVING INTERMEDIATE FLACCID CONNECTOR	337	....And cam
299	.Chain connector	338	....Spring biased jaw
300	.Elastic connector	339	....Circular work engageable
301	..Strap connector	340	....And pin attachment
302	.Strap connector	341	....And disconnect means
303	HAVING MAGNETIC FASTENER	342.1	..Including a button fastening element
304	HAVING ADHESIVE FASTENER	343	..And hook
305	COMBINED DIVERSE MULTIPART FASTENERS	344	...Having intermediate connector allowing movement
307	.Buckle	345	....And adjustment means
308	..And buckles	346	...Having gripping configuration on clasp jaw
309	...Having separate material adjustment means	347	....Penetrating type
310	...Having separate disconnect means	348	...Having cam
311	....Pivotal lever type	349	...Having separable jaws
312	...Having disconnect structure	350	..And penetrating prong
313	....Resilient cooperating means	351	..And pin
314	...And pin	352	...Having separate pin loss prevention means
315	...Crossed belt accommodating	353	....Pin coextensive, coplanar, and contiguous with clasp jaw
316	..And clasp	354	...Pin coextensive, coplanar, and contiguous with clasp jaw
317	..And pin	355	...Pin forms part of clasp jaw
318	..And hook	356	.Pin
319	...Having disconnect means	357	..And pin
320	...Having penetrating prong	358	...And disconnect means
321	...Buckle having plural receiving slots	359	....Hook and eye type
322.1	..Including a button fastening element	360	...And hook
		361	....Having connector allowing movement
		362	...Having intermediate connector allowing movement
		363	..And hook
		364	...Having intermediate connector allowing movement
		365	....And adjustment means
		366	...Hook having locking means

367.1	..Including a button fastening element	113 R	.Covers
368	..And penetrating prong	113 MP	..Metal or plastic caps
369	.Hook	114	.Pads
370	..And hook	114.1	.Flexible button
371	...Having biasing spring	114.2	.Swivel button
372	...Separately connected	114.3	.Tufting type
373	...Having securing means	114.4	.Button with cavity for friction grip fastener
374	....Sliding	114.05	.Button with shank for friction grip fastener
375	....Snap type	114.6	.Heat or adhesive secured type
376	....Pivoted	114.7	.Thread or wire through apertured button
377	..Having penetrating prong	114.8	.Eye shank type button
378.1	..Including a button fastening element	114.9	.Ornamental type
379.1	.Button fastening element including another fastener element	114.11	.For cuff or collar
380	.Penetrating prong	114.12	.Fabric embracing
89	INTERCHANGEABLE BUTTON LOOP AND PIN	712	DRAWSTRING, LACED-FASTENER, OR SEPARATE ESSENTIAL COOPERATING DEVICE THEREFOR
90.1	BUTTON WITH FASTENER	712.1	.Includes separate device for holding drawn portion of lacing
90.5	.Loss-preventing devices	712.2	..Device engages tie in lacing
91	.Adjustable	712.3	...And fully covers tie
92	.Cloth shanks and covers	712.4	..Device engages element or formation on lacing
93	.Multiple attachment	712.5	..Having relatively movable holding components or surfaces
94	.Deflecting prong or rivet	712.6	...With pivotal connection therebetween
95	..Anvil or plate	712.7	...With integral resilient linking structure therebetween
96	..Integral	712.8	....Formed from wire
97	.Hinged leaf	712.9	..Having lacing wound thereabout or wedged therein
98	..Axially rotating	713	.With holding means fixedly mounted on lacing
99	..Double	713.1	..And forming lacing tips
100	..Sliding	713.2	.Includes lacing holding structure within directing means therefor
100.5	.Sliding bar	713.3	.Having diverse shaped directing means for lacing
101 R	.Integral or rigid stud	713.4	.Having lacing directing means in particular pattern
101 B	..Bent sheet metal (integral)	713.5	.Includes lacing guiding roller within directing means
102 R	.Link	713.6	.Having eyelet type directing means
102 A	..Integral rubber button, extendable shank	713.7	..With permanently deformed mounting structure
102 E	..Extendably connected	713.8	...Mounting structure formed from different material than directing passage
102 PL	..Pivoted leaf		
102 SL	..Releasably locked		
102 FC	..French cuff		
102 T	..Tufting		
102 P	..Integral piece		
103	.Pin attached		
104	.Separable		
105	..Screw		
106	..Spring		
107	...Resilient head		
108	...Resilient socket		
109	...Rotating head		
110	...With operating devices		
111	.Separate thread bar		
112	.Spiral fastener		

713.9	..Having hook shaped directing means	134 L	...Fixed and movable jaws, movable jaw pulled
714	..And movable component or surface for closing throat	134 N	...Link-connected parallel jaws
714.1	..Mounted by structure allowing bodily movement thereof	134 P	...Dual cam
714.2	..Formed from wire	132 AA	..Pivotal means with plate aperture
714.3	..With mounting structure formed from different material	132 WL	..Jaws locked together by cam, wedge, lever, or screw
714.4	..With permanently deformed mounting structure	135 R	..Screw clamp
714.5	...Expanding stud	135 A	..Screw clamp with snubber
714.6	..Having loop or sleeve shaped directing means	135 K	..Tangential bolt
714.7	..Entirely formed from flaccid material	135 L	..J-shaped bolt
714.8	..Mounted by structure allowing bodily movement thereof	135 N	..Bolt perpendicular to cable axis
714.9	..Formed from wire	136 R	..Sliding part or wedge
715	..With permanently deformed mounting structure	136 K	..Rope looped about movable member
715.1	...Loop or sleeve closed when mounted	136 L	..Rope clamped between cone and socket
715.2	...Expanding stud	136 A	..Sliding ball
715.3	..Having elastic segment in lacing	136 B	..Screw actuated
715.4	..Having means covering tip of lacing	115 A	..Bendable, ductible
715.5	..Tasseled	115 F	..Safety release
715.6	..With plural components	115 G	..Alignable aperture and spring pressed moving element
715.7	..With permanently deformed mounting structure	115 H	..Loop, adjustable
114.5	STRAP CABLE OR PIPE BUTTON	115 J	..Snubbers, cleats by dielectric loss
115 R	CORD AND ROPE HOLDERS	115 K	..Loop engaging
116 R	..Chain	115 L	..Ball or roller
116 A	..Bead chain fasteners	115 M	..Sliding wedge
122.3	..Sheathed strand	115 N	..Helical preform
122.6	..Plural-strand cord or rope	163 R	BUCKLES
127	..Friction disk	164	..Harness
128	..Knot engaging	165	..Combined buckles and snap hooks
129 R	..One-piece	166	..Lock
130	..Wedge slot	167	...Key
131 R	..Wire	168	..Clamping
131 C	...Cord runs through center of coil	169	...One-piece
129 B	..Sheet material	170	...Pivoted part or lever
129 A	..Slack adjuster	171	...Sliding part or wedge
129 D	..Rubber	172	..Cross bails
129 C	..Wire	173	...Pivoted stud plate
129 W	..Swagged, deformable	174	...Rigid stud
132 R	..Pivoted part	175	..Penetrating tongue
133	..Lever tension	176	...Guarded
134 R	..Cam lever	177	...One-piece
134 KA	...Laterally shifted rope	178	...Multiple
134 KB	...Cam engaging or disengaging	179	...Pivoted
		180	....Lever actuated
		181	....Stud
		182	...Sliding part or wedge
			..Strap loops and attaching devices

183	..Loop shields	468	...With separate flaccid flap or pocket for protecting structure-to-be-secured
184	.Garment shielded		
	.Combined pressure bar and guard		
185	..Hook attached	469	...With separate, cavity-blocking gate on receiving member
	.Penetrating prong		
186	..One-piece	470	...Resilient inserted or receiving member
187	...Hook attached		
188	..Pivoted	471	....Inserted or receiving member substantially covered or coated for protection or to promote gripping
189	...Hook attached		
190	..Slide		
191	.Pivoted lever		
192	..Hook attached	472	....Resilient inserted member
193	..Looped strap	473	.....Having engaging face formed from nonmetallic material
194	.Sliding part of wedge		
195	..Hook attached	474	.....Having head and neck type engaging face
196	..Looped strap		
197	.Looped strap	475	.....Having internal supporting or reinforcing element
198	.One-piece		
199	..Hook attached	476	.....Circular head or neck
200	..Looped strap	477	...Having wedge shaped, inserted and receiving members
163 FC	.Fabric covered		
163 K	.Ornamental and/or object supported	478	...With specific means for attaching to flaccid strap or supporting strap
705	PIERCED EARRING FASTENER	479	....On the inserted member
453	INDEPENDENT, HEADED, APERTURE PASS-THROUGH FASTENER	480	...Having necked button sliding along length of closed, variable width loop
454	FASTENER WITH REVOLVING COMPONENT WRAPPING STRUCTURE-TO-BE-SECURED ABOUT FASTENER	481	.Having flaccid gripping member
		482	..Formed from elastic material
455	CLASP, CLIP, SUPPORT-CLAMP, OR REQUIRED COMPONENT THEREOF	483	.Encircling gripping member including semirigid band and operator for tightening
456	.Gripping member adapted for tool actuation or release		
457	.With specific mounting means for attaching to rigid or semirigid supporting structure or structure-to-be-secured	484	.Encircling gripping member including semirigid band and means for adjusting girth
458	..For cooperating with aperture in supporting structure or structure-to-be-secured	485	.With specifically shaped, nongripping, rigid structure for connecting independently operable clasps, clips, or support-clamps
459	.Dissociable gripping members		
460	..Channel and inserted bar	486	.Gripping member face integral with or rigidly affixed to screw-driving portion
461	...Having operator or locking means		
462	...Resilient channel or bar	487	.Having either discrete flaccid or thin, nonbiasing, integral, connecting hinge
463	.Having gripping member actuated by fluid force		
464	.Having inserted and receiving interlocking members connected by bendable, nonbiasing strap	488	.Having equally spaced or continual gripping faces revolving about central axis
465	..Discrete flaccid strap	489	.Including pivoted gripping member
466	...With distinct means for preventing separation of members	490	..Pivoted member also slides
		491	...Tapered face
467	....Slidably mounted		

- 492 ..Pivoting gripping member either supports or coacts with sliding engaging face
- 493 ..Having three or more pivotally connected gripping members
- 494 ..Having toggle operator for moving
- 495 ..Having rigid linking arm pivotally connected to each gripping member
- 496 ...With extended lever portion
- 497Having lever end modified for attachment to support
- 498 ..Pivoted gripping member applies camming force
- 499 ..Spring or resiliently biased about pivot
- 500 ...Distinct spring
- 501Attached solely by spring
- 502With operator for moving pivoted member
- 503Camming or wedging element
- 504Pivoted or rotated element
- 505With position locking-means for gripping members
- 506Including pivoted arm
- 507Having specific surface material or irregularity on or along engaging face
- 508Having specific handle structure
- 509Coil spring
- 510Having coil portion coaxial or parallel with pivotal axis
- 511Flat or leaf spring
- 512 ..Closed by gravity or weight of structure-to-be-secured
- 513 ..With operator means for moving pivoted member
- 514 ...Threaded cylindrical rod and mating cavity
- 515 ...Camming or wedging element
- 516Pivoted or rotated element
- 517 ..With position locking-means for gripping members
- 518 ...Integral locking-means
- 519 ..Having inserted and receiving interlocking engaging faces
- 520 ...Resilient gripping member
- 521 ..Having specific surface material or irregularity on or along engaging face
- 522 ..Including track or way guided and retained gripping member
- 523 ..Biased by distinct spring
- 524 ..With operator for moving guided member
- 525 ...Threaded cylindrical rod and mating cavity
- 526 ..Track or way oblique to path of gripping member
- 527 ..With position locking-means for gripping members
- 528 ...Integral locking-means
- 529 ..With specific mounting means for attaching to flaccid supporting structure or structure-to-be-secured
- 530 .Having gripping member formed from, biased by, or mounted on, resilient member
- 531 ..Integrally combined, independently operable, diverse clasps, clips, or support-clamps
- 532 ..With specific means for mounting to flaccid supporting structure or structure-to-be-secured
- 533 ...Mounting means made entirely from integral wire portion of resilient gripping member
- 534Wire coiled about flaccid support structure
- 535 ..With operator for moving biased engaging face
- 536 ...Camming or wedging element
- 537Encircling sleeve type element
- 538Pivoted or rotated element
- 539Element pivots or rotates in plane parallel to plane bisecting opposed engaging faces
- 540Elongated element with pivot between cam and handle portions
- 541For moving engaging face of U-shaped gripping member
- 542 ..With position locking-means for engaging faces
- 543 ...Integral locking-means
- 544 ...Pivoted lock member
- 545 ..Opposed engaging faces on gripping member formed from single piece of resilient material

546	...Piece totally forms clasp, clip, or support-clamp and has shaped, wirelike, or bandlike configuration with uniform cross section throughout its length	568	.Having gripping member shifted by operator
547	....Opposed faces located in and bias towards common plane in nonuse position	569	..Threaded cylindrical rod and mating cavity
548	....Resilient gripping member having tightly twisted portion	570	.Formed from single rigid piece of material
549	....Resilient gripping member having coiled portion	571	..Having specific surface irregularity on or along engaging face
550	.....Convolutions of coil form faces	572.1	SEPARABLE-FASTENER OR REQUIRED COMPONENT THEREOF (E.G., PROJECTION AND CAVITY TO COMPLETE INTERLOCK)
551	....Relatively movable segments of resilient gripping member contact and cross in nonuse position	573.09	.With third detached member completing interlock (e.g., hook type)
552	.....Segments form opposed engaging faces	573.11	..Quick connect or release (e.g., spring and detent)
553	.....Having specific handle structure	574.1	..For jewelry
554	.....Having specific handle structure	575.1	..Including eyelet (e.g., shoes)
555	....Terminal end of resilient member having engagement or disengagement enhancing structural modifications	576.1	..For key holder
556	....Having specific surface irregularity on or along engaging face	577.1	..For tire chain, strap, etc. (e.g., rotatable or sliding spring gate)
557	...Having specific handle structure	578.1	..For apparel and related accessories
558	....Movably attached to gripping member	578.11	...Button, button related
559	...Interlocking faces	578.12	....Snap (e.g., key hole type)
560	...With reinforcing member	578.13	...Post and receiver(e.g., pin and slot)
561	...Having specific surface irregularity on or along engaging face	578.14	...Hook (e.g., within cavity)
562	....Corrugated or toothed face	578.15	...Belt, strap, etc. (e.g., buckle or snap fastener)
563	...Clasp, clip, or support-clamp cut or shaped from a single sheet of resilient, uniformly thick, planar material	578.16	...Glove
564	..Having specific surface material or irregularity on or along engaging face	578.17	...Purse, wallet, etc.
565	..Having specific handle structure	579.09	..Belt, strap, harness, etc.
566	..Including resilient biasing wire	579.11	...For safety belt buckle, strap, harness, etc.
567	...Coiled wire	580.1	..Sliding or rotating element
		580.11	...Element having key slot
		581.1	..Resilient element (e.g., snap type)
		581.11	...For upholstery, panel, trim strip, etc. (e.g., spring biased)
		581.12	...Link with pivoted gate
		582.1	..Hook
		582.11	...Snap with spring bias (e.g., gate)
		582.12	...For connecting chains (e.g., opposed pivoted hook)
		582.13	...For heavy load bearing device (e.g., chain, rope, cable, etc.)

- 582.14Haim, harness, whiffletree, rein, etc.
- 583.1 ..For chain, rope, cable, etc.
- 583.11 ...Coupler with sliding socket to complete interlock
- 584.1 ..Each mating member having similarly shaped, sized, and operated interlocking or intermeshable face
- 585.1 ..Zipper-type (e.g., slider)
- 585.11 ...For garment (e.g., with ribs and grooves interlocking elements)
- 585.12 ...For container (e.g., bag)
- 586.1 ..Resilient element
- 586.11 ...Snap (e.g., identical elements)
- 587.1 ..Clasp (e.g., spring type)
- 587.11 ...For jewelry (e.g., buckle type)
- 587.12 ...For belt or strap
- 588.1 ..Hook
- 588.11 ...For belt, strap, etc. (e.g., with pivoted gate locking member)
- 588.12 ...For apparel
- 589.1 ..Slot and tab or tongue
- 590.1 ..Sliding or rotating element
- 591.1 ..Including member having distinct formations and mating member selectively interlocking therewith
- 592.1 ..Hook
- 592.11 ...Multiple catch (e.g., with pivoted gate)
- 593.1 ..Slot and tab or tongue
- 593.11 ...Having teeth or serrations (e.g., sliding with respect to each other)
- 594.1 ..Resilient element (e.g., with spring)
- 594.11 ...Snap with cavity
- 595.1 ..Pin, post and receiver
- 596.1 ..Notched clasp (e.g., with receiving slot)
- 598.1 ..Projection passes through cavity then moves toward noninserted portion of its member to complete interlock (e.g., snap hook)
- 598.2 ...Entire projection member forms loop or ring when interlocked
- 598.3Includes slidable gate closing entrance throat
- 598.4 ...Hook type projection member
- 598.5Plural hooks entering opposite sides of same cavity
- 598.6Hooks formed solely from wire
- 598.7Noninserted portion of projection member includes movably connected gate for closing access throat
- 598.8Threaded gate
- 598.9Revolvably mounted disc shaped gate
- 599.1Pivotally connected gate
- 599.2Gate swings transversely to plane of hook
- 599.3Gate also slides relative to pivot
- 599.4Having means biasing gate about pivot
- 599.5And position locking-means for gate
- 599.6Includes distinct biasing spring
- 599.7Coil type spring
- 599.8Coiled about pivotal axis of gate
- 599.9Having position locking-means for gate
- 600.1Locking-means pivotally connected
- 600.2Locking-means slidably mounted
- 600.3Gate closes when structure-to-be-secured is tensioned
- 600.4Track or way guided gate
- 600.5Having means biasing gate
- 600.6Guide of gate encircles shank
- 600.7Cavity in shank forms track or way
- 600.8With position locking-means for gate
- 600.9Resilient, self-biased gate
- 601.1With position locking-means for gate
- 601.2Gate and hook formed from plastic
- 601.3Gate and hook formed solely from wire
- 601.4Gate and hook formed from single piece of sheet metal
- 601.5Projection pivotally attached to shank or mounting structure
- 601.6Projection slidably mounted to shank or mounting structure

601.7	....Projection self-biased towards shank or mounting structure	621	.....Plastic deformation of means or surface required for mounting
601.8	.....And formed solely from wire	622	.....Having separate mounting means encompassing cross section of projection
601.9	.....Cooperating with relatively stationary wire gate		
602	..Interlocking portion actuated or released responsive to preselected condition (e.g., heat, pressure)	623	.....Having dome-shaped head and expansion slit along side
		624	.....And connected surface at tip of head
603	..Having electric or fluid powered, actuation or release, of interlock	625	.....Having inserted end formed by oppositely biased surface segments
604	..Projection having movable connection between components thereof or variable configuration	626	.....Constructed from wire
		627	....Having both resiliently biased and rigid components forming external surface of projection
605	...With additional, similar projection for engaging different cavity	628	..Projection member including noninserted spring for engaging and pushing against receiving member
606	...And operator therefor		
607	....Including camming or wedging element on projection member	629	..Receiving member includes either movable connection between interlocking components or variable configuration cavity
608	.....Pivotally attached element		
609	...Including pivotal connection between projection components		
610	....Component slides relative to connection	630	...With additional cavity for engaging different projection
611	....And spring or resilient extension biasing about pivot	631	...Having common means actuating or releasing interlocking components or surfaces
612	...Including slidably guided connection between nonself-biasing projection components	632	.....And interlocking with independently associated or dissociated projection members
613	....And distinct spring biasing component		
614	...Including resiliently biased projection component or surface segment	633	...And operator therefor
		634	....For plural, oppositely shifting, similar interlocking components or segments
615	....Requiring manual force applied against bias to interlock or disengage	635	.....Operator includes camming or wedging element
616	.....Having connected leading edge and separated trailing arms	636	....Including pivotally connected element on receiving member
617	....Cooperating with cavity having side walls and axially biased component capping end	637	.....For shifting pivotally connected interlocking component
618	....Forming total external surface of projection	638	.....Element and component pivot about same axis
619	.....And encircling hollow central area	639	.....For shifting slidably connected and guided, nonself-biasing interlocking component
620Having separate mounting means inserted into area	640Including slidably connected and guided element on receiving member

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|-----|---|-----|--|
| 641 |For shifting pivotally connected interlocking component | 660 |Component formed solely by flaccid cord |
| 642 |For shifting slidably connected and guided, nonself-biasing, interlocking component | 661 |With nonflaccid component |
| 643 | ...Having pivotally connected interlocking component | 662 | ...Having resiliently biased interlocking component or segment |
| 644 |Blocking removal of formation on projection from complementary formation on side wall of cavity | 663 |Cavity or projection rotates about axis of cavity to dissociate |
| 645 |And position locking-means therefor | 664 |Requiring manual force applied against bias to interlock or disengage |
| 646 |And relatively movable handle therefor | 665 |And partially blocking separate, nonresilient access opening of cavity |
| 647 |Requiring manual force thereon to interlock or disengage | 666 |And closed elongated access opening for guiding transverse projection travel after insertion |
| 648 |Plural, oppositely shifting, similar interlocking components | 667 |Nonresilient walls define opening |
| 649 |Having aperture therein alignable with parallel access opening | 668 |Formed from wire |
| 650 |Having interlocking portion thereof housed continuously within cavity | 669 |And access opening with gapped perimeter for allowing movement of noninserted projection support therepast |
| 651 | ...Having cavity with side walls and axially biased component capping end | 670 |Cavity constructed solely from wire |
| 652 | ...Having slidably connected, nonself-biasing interlocking component | 671 |Partially blocking separate, nonresilient, access opening of cavity |
| 653 |Blocking removal of formation on projection from complementary formation on side wall of cavity | 672 |And bodily shifted into or out of interlock location by manual force thereon |
| 654 |And position locking-means therefor | 673 |Formed from wire |
| 655 |And relatively movable handle therefor | 674 |Having curved or bent engaging section conforming to contour of projection |
| 656 |Requiring manual force thereon to interlock or disengage | 675 |Similar, distinct sections |
| 657 |Plural, oppositely shifting, similar interlocking components | 676 |Having distinct sections engaging projection at spaced points |
| 658 |Having closed aperture therethrough alignable with parallel access opening | 677 |Including separate, nonprojection-engaging spring for biasing |
| 659 | ...Having flaccid component defining access opening of cavity | 678 |Biased component or segment entirely formed from wire |
| | | 679 |Having portion of cavity deformed during mounting |
| | | 680 |And cooperating with separate mounting component |
| | | 681 |Having axially extending expansion slit along side of cavity |

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|-------|--|-------|--|
| 682.1 | ..Means for mounting projection or cavity portion | 706.3 | ..Means detachable from or flaccidly connected to pin (e.g., hatpin type) |
| 683 | ...Allows bodily movement facilitating interlock | 706.4 | ...For pin having plural penetrating portions |
| 684 |About pivotal connection | 706.5 | ...Including relatively movable guiding, holding, or protecting components or surfaces |
| 685 |Includes resilient component separate from portion | 706.6 |Having operator for moving holding component or surface |
| 686 | ...Allows relocation of portion | 706.7 |Moves pivoting holding component |
| 687 | ...Having component of means permanently deformed during mounting operation | 706.8 |Moves slidably guided, nonself-biasing, holding component |
| 688 |And formed from or fixedly attached to projection or cavity portion | 706.9 | ...Having pierceable (e.g., cork) or naturally resilient (e.g., rubber) surfaces |
| 689 |Cooperates with detached component of means | 707 | ...With pivotal connection therebetween |
| 690 |Having shape facilitating impaling of mounting surface | 707.1 | ...With slidable connection between nonself-biasing components |
| 691 |And inserted into or through cavity or projection | 707.2 | ...Having resiliently biased component or surface |
| 692 |And encircling cavity or projection | 707.3 |Coiled about longitudinal axis of held portion |
| 693 | ...Consisting of thermally fusible substance | 707.4 |And aperture therein alignable with another spaced aperture of means |
| 694 | ...Having threaded formation | 707.5 |And nonresilient structure for guiding portion thereto |
| 695 | ...Having specific structure for cooperating with stitching | 707.6 | ...Including structure for cooperating with formation (e.g., cavity) formed on penetrating portion |
| 696 | ...Having shape facilitating impaling of mounting surface | 707.7 | ..For pin having plural penetrating portions |
| 697.1 | ..Plural distinct cavities or projections | 707.8 | ...Each independently movable towards and into cooperation with means |
| 697.2 | ...Hook type | 707.9 | ..Including relatively movable guiding, holding, or protecting components or surfaces |
| 698.1 | ..Hook-shaped projection member passing through cavity | 708 | ...With connection allowing component to revolve about axis of held penetrating portion |
| 698.2 | ...Formed from single piece of sheet metal | 708.1 | ...With pivotal connection therebetween |
| 698.3 | ...Formed solely from wire | 708.2 |Having position locking means therefor |
| 700 | ..Cavity having specific shape | 708.3 |Spring or resiliently biased |
| 701 | ...Including closed elongated access opening for guiding transverse projection travel after insertion | | |
| 702 | ...Having access opening with gapped perimeter for allowing movement of noninserted projection support therepast | | |
| 706 | PIN OR SEPARATE ESSENTIAL COOPERATING DEVICE THEREFOR | | |
| 706.1 | ..With separately operable, manually releasable, nonpenetrating means for mounting (e.g., drapery hook) | | |
| 706.2 | ..Having distinct guiding, holding, or protecting means for penetrated portion | | |

- 708.4 ...With slidable connection between nonself-biasing components
- 708.5Component slides parallel to axis of held penetrating portion
- 708.6 ...Means engages formation formed on penetrating portion
- 708.7 ...Having nonresilient and resilient components
- 708.8 ...Means formed from single resilient wire
- 708.9 ...Means formed from resilient sheet metal
- 709 ...With independent, spaced, intermediate connections, or formations (e.g., coils), about which portion or means move
- 709.1 ...Includes slidable connection
- 709.2 ...With pivotal connection between penetrating portion and means
- 709.3 ...Connection also permits sliding movement
- 709.4 ...Resiliently biased about connection
- 709.5 ...With slidable connection intermediate penetrating portion and means
- 709.6 ...Having resilient bridging structure between portion and means
- 709.7 ...Means includes structure for cooperating with formation (e.g., cavity) formed on portion
- 709.8 ...And penetrating portion formed from wire
- 709.9Bridging structure includes elongated nonwire element
- 710Wire also forms coiled bridging structure about which portion moves
- 710.1Including distinct device for cooperating with coil
- 710.2Having means also formed from same wire
- 710.3 ...With cavity for guiding structure-to-be-secured towards penetrating portion (e.g., stocking support)
- 710.4 ...Having penetrating portion retractable or of changeable length
- 710.5 ...Having interconnected distinct penetrating portions
- 710.6 ..Connection allows movement therebetween
- 710.7 ...Slidable connection
- 710.8 ...Resilient connection
- 710.9 ..Formed from common wire
- 711 ...And pointing in same direction
- 711.1 ...Penetrating portion includes relatively movable structure for resisting extraction
- 711.2 ...Having specific wire penetrating portion
- 711.3 ..Wire curved or bent
- 711.4 ...Having distinct head structure
- 711.5 ..Movably connected to penetrating portion
- 265 R **STRAP-END-ATTACHING DEVICES**
- 265 A .Bendable sheet material
- 265 B .Watch pintle connected
- 265 C .Webbing to tube (lawn chair)
- 265 BC .Buckle connected
- 265 EC .End clasp
- 265 H .Hook
- 265 AL .Ring-loop
- 265 CD .Cargo tiedown
- 265 WS .Watch strap
- 265 EE .Enlarged end epoxy
- 267 **PIVOTED EDGE STAYS**
- 703.1 **FASTENER DESTRUCTIVELY SECURED BY RESHAPING DISTORTION FORCE (E.G., DUCTILE FASTENER)**
- 703.2 .Distorted structure having shape facilitating impaling
- 703.3 ..And distinct fastener structure cooperating with impaled structure
- 703.4 ...Detached cooperating structure
- 703.5 ..Including plural impaling elements
- 703.6 ...Elements form single aperture (e.g., split shank type)
- 704.1 **READILY INTERLOCKING, TWO-PART FASTENER REQUIRING EITHER DESTRUCTIVE OR TOOL DISENGAGEMENT**
- 704.2 .Including additional fastener structure linking parts
- 716 **HANGER ON PORTABLE ARTICLE SUPPORT FOR MANUAL ATTACHMENT THEREOF TO OVERHEAD SUPPORT (E.G., DRAPERY HOOK)**

CROSS-REFERENCE ART COLLECTIONS

900.1 SHIRT COLLAR HOLDERS
 901 PENETRATING-TYPE PAPER FASTENER
 902 TUFTING BUTTON FASTENER
 903 ARMPIT SHIELD FASTENER
 904 GLOVE FASTENER
 905 WATCH CHAIN FASTENER (E.G.,
 SWIVEL HOOK)
 906 FASTENER FOR ATTACHING BAND TO
 WATCH OR SIMILAR ARTICLE
 (E.G., NAME PLATE)
 907 PLASTIC HOOK
 908 FISHLINE SUPPORTED ATTACHMENT
 HOOK
 909 WINDERS FOR FLEXIBLE MATERIAL
 910 ONE-PIECE

FOREIGN ART COLLECTIONS**FOR 000 CLASS-RELATED FOREIGN DOCUMENTS**

Any foreign patents non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collection listed below. These collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 **SEPARABLE-FASTENER OR REQUIRED COMPONENT THEREOF (24/572)**
 FOR 101 ..With third, detached member completing interlock (24/573.1)
 FOR 102 ..And linking cavities in adjacent parallel panels (24/573.2)
 FOR 103 ..Third member includes independently engaged hooks for linking spaced cavities (24/573.3)
 FOR 104 ...And movably connected, noninserted gate for closing access throat of hook (24/573.4)

FOR 105 ..Third member includes relatively movable, separate components (24/373.5)
 FOR 106 ...For parachute harness (24/573.6)
 FOR 107 ..Third member consists of unitary elongated element (24/573.7)
 FOR 108 ..Each mating member having similarly shaped, sized, and operated interlocking face (24/575)
 FOR 109 ..Including elongated face having identical, parallel cross sections throughout its length (24/576)
 FOR 110 ..Including elongated face having varying, parallel cross sections throughout its length (24/577)
 FOR 111 ..Including complementary shaped and alternately useable interlocking faces (24/578)
 FOR 112 ..Single piece hook-shaped member (e.g., mating garment hooks) (24/579.1)
 FOR 113 ..Including member having distinct formations and mating member selectively interlocking therewith (24/580)
 FOR 114 ..Formations positioned along wall forming mating-member-guiding cavity (24/581)
 FOR 115 ...Formations member having movably attached or biased interlocking structure (24/582)
 FOR 116 ..Formations member having movably attached or biased interlocking structure (24/583)
 FOR 117 ..Selectively interlocking member having movably attached or biased interlocking component (24/584)
 FOR 118 ...And cavity for guiding movement of formations (24/585)
 FOR 119 ..Having mounting means allowing repositioning of member for facilitating interlock (24/586)

FOR 120 .Including member having elongated, resilient, interlocking face with identical, parallel cross-sections throughout its length (24/587)

FOR 121 .Including receiving member having cavity and mating member having insertable projection guided to interlock thereby (24/588)

FOR 122 ..Having divergent interlock means distinct from cavity or projection of its member (24/589)

FOR 123 ...Projection or cavity rotates about axis of cavity access opening to interlock (24/590)

FOR 124 ...Having projection rotatably connected to its member (24/591)

FOR 125And operator therefor (24/592)

FOR 126And position locking-means therefor (24/593)

FOR 127Including notch or hump on projection axially biased by spring (24/594)

FOR 128Including radially biased element engaging against relatively rotating surface at connection (24/595)

FOR 129And spring for axially biasing projection (24/596)

FOR 130 ...Receiving member includes either movable connection between cavity components or variable configuration cavity (24/597)

DIGESTS

DIG 8 **PAPER CLIPS**

DIG 9 .Sheet material

DIG 10 .Wire

DIG 11 **ADHESIVE**

DIG 13 **WEIGHTED CLIP OR CLAMP**

DIG 16 **MULTIFLEX STRAP**

DIG 17 **MULTIFLEX AXIAL**

DIG 22 **JAW STRUCTURES, TEETH**

DIG 26 **FLUID PRESSURE**

DIG 28 **CO-PLANAR FLAT CLIP**

DIG 29 **LAUNDRY DEVICE**

DIG 30 **SEPARABLE-FASTENER OR REQUIRED COMPONENT THEREOF**

DIG 31 .With third, detached member completing interlock

DIG 32 ..And linking cavities in adjacent parallel panels

DIG 33 ..Third member includes independently engaged hooks for linking spaced cavities

DIG 34 ...And movably connected, noninserted gate for closing access throat of hook

DIG 35 ..Third member includes relatively movable, separate components

DIG 36 ...For parachute harness

DIG 37 ..Third member consists of unitary elongated element

DIG 38 .Each mating member having similarly shaped, sized, and operated interlocking face

DIG 39 ..Including elongated face having identical, parallel cross sections throughout its length

DIG 40 ..Including elongated face having varying, parallel cross sections throughout its length

DIG 41 ..Including complementary shaped and alternately useable interlocking faces

DIG 42 ..Single piece hook-shaped member (e.g., mating garment hooks)

DIG 43 .Including member having distinct formations and mating member selectively interlocking therewith

DIG 44 ..Formations positioned along wall forming mating-member-guiding cavity

DIG 45 ...Formations member having movably attached or biased interlocking structure

DIG 46 ..Formations member having movably attached or biased interlocking structure

DIG 47 ..Selectively interlocking member having movably attached or biased interlocking component

DIG 48 ...And cavity for guiding movement of formations

DIG 49 ..Having mounting means allowing repositioning of member for facilitating interlock

- DIG 50 .Including member having
 elongated, resilient,
 interlocking face with
 identical, parallel cross-
 sections throughout its length
- DIG 51 .Including receiving member
 having cavity and mating
 member having insertable
 projection guided to interlock
 thereby
- DIG 52 ..Having divergent interlock
 means distinct from cavity or
 projection of its member
- DIG 53 ..Projection or cavity rotates
 about axis of cavity access
 opening to interlock
- DIG 54 ...Having projection rotatably
 connected to its member
- DIG 55And operator therefor
- DIG 56And position locking-means
 therefor
- DIG 57Including notch or hump on
 projection axially biased by
 spring
- DIG 58Including radially biased
 element engaging against
 relatively rotating surface at
 connection
- DIG 59And spring for axially
 biasing projection
- DIG 60 ...Receiving member includes
 either movable connection
 between cavity components or
 variable configuration cavity